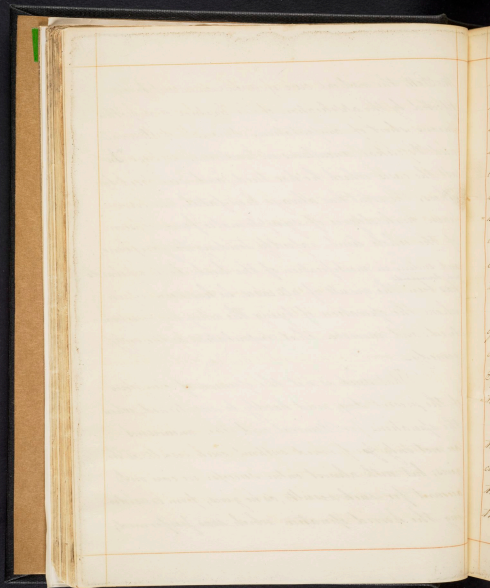


Mr Pett, the radical cure of aneurism is not to be effected by the application of the ligature or any other means short of amputation. Speaking of Femoral and Popliteal aneurisms in particular, he says In all the cases which he has tried, and seen tried by others, the event has always been fatal, excessive pain, high degree of symptomatic fever, tension of the whole limb, rapidly tending to gangrene, and ending in mortification of the limb both upwards ^{and downwards} has been the result of all cases, he has seen, upon whom the operation of tying the artery has been practised; and moreover that amputation is the only remedy.

That such is not the opinion of Surgeons of the present day, need hardly be mentioned, when the operations for Femoral and other aneurisms are not only performed without such results as he gives; but with almost entire success: we can only account for such results, as he gives, from considering the horrid operation which was performed,

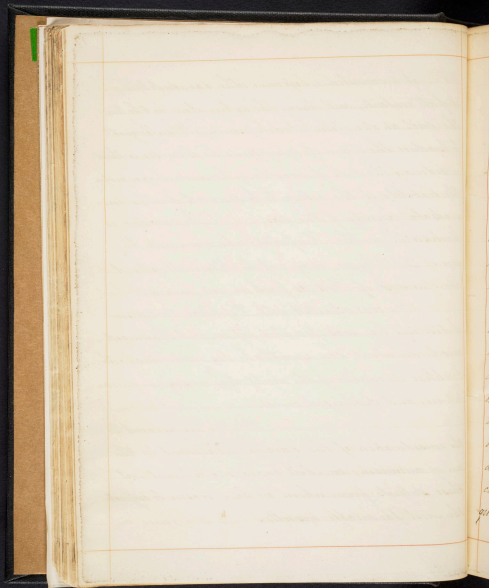


The operation consisted in opening the sac, emptying it of its contents, and tying the artery above and below the sac, an operation in our opinion, all sufficient to produce the train of symptoms he describes, without considering the risk of secondary hemorrhage, from the liability of the artery to be diseased in the immediate vicinity of the sac.

The case of a blacksmith in the Hospital, who was under the care of Dr. Physic may not be ill-timed whilst the opinion of Pott is fresh in our minds. —

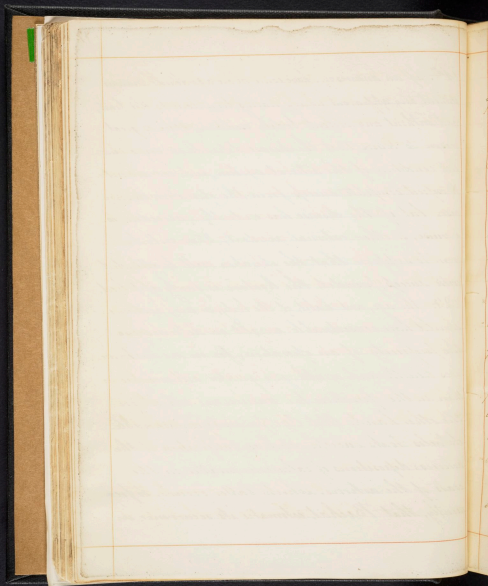
He was admitted with Popliteal Aneurism of the left leg, was operated upon, and discharged cured, in about six months he was readmitted with Popliteal Aneurism of the right leg, was again operated on, and discharged cured.

Before we proceed to the consideration of the surgical treatment for the cure of aneurism, we shall endeavour to point out those subjects from whom we have reason to expect the most favourable results.



1st. if an aneurism, have come on in a gradual manner without any apparent injury having been done to the part, and without any violent bodily exertion, there is great reason to believe that the disease depends on some morbid condition of the arterial system, and we are not to expect complete success from the operation in every case. but if the disease has evidently succeeded to a blow, or other external accident, there will be room to suppose that the operation will be attended with success, provided the ligature is fairly applied.

2^d. the age, and habit, of the body, in every instance should have considerable weight in determining the propriety of an operation, for in no instance does health and youth give greater advantages than in the operation for aneurism; whilst on the other hand, Old Age, presents innumerable obstacles to its success, such as, ossification of the arteries: depositions of calcareous matter in the coats of the arteries, which latter occurs, so frequently, that Bichat, estimates its occurrence in

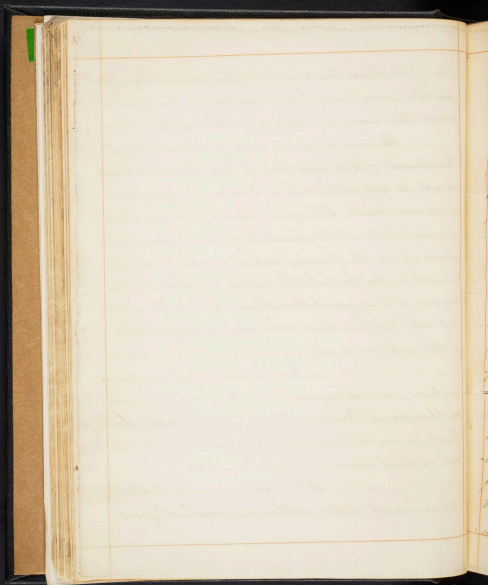


2 out of 10 above the age of 60; these and other difficulties, may prevent the entire closure, and of course the complete union of the vessel.

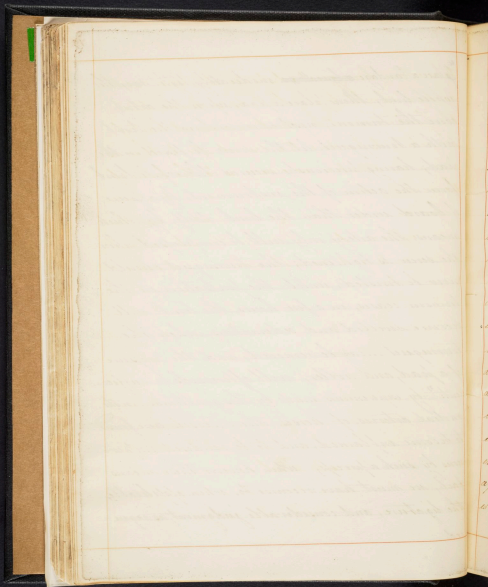
We now to speak of the surgical treatment which according to the division already made, is applicable only to external or superficial aneurism; and 1st of Prepuce. Scarpa admits the propriety of the practice of compression, when made above the tumour, and on a sound part of the artery; but forbids the use of it, when the aneurism is of a painful nature; also in those attended with stomatous, ulcerated, earthy disease, of the arterial coats.

For the purpose of producing prepuce, various measures have been employed, such as, Bandages, Tourniquets &c. Scarpa states, that bandages, are entitled to attention, as having produced radical cures.

Mr. Poirer recommends the employment of the following method, "first



Place a bandage ~~bandage~~ moderately tight over the whole limb, then place a pad, upon the artery above the tumour, next surrounding the limb with a tourniquet, let the screw be fixed in the pad; having previously secured the whole limb from the action of the instrument, by a Piece of board wider than the limb itself, by which means, the artery only will be compressed, when the screw is tightened; the tourniquet should now be twisted, until the pulsation in the tumour ceases, in a few hours, the limb will become swelled and adematous, when the tourniquet may be removed; and the pressure of a pad, and roller, will afterwards be sufficient - by experiments made by this gentleman, on the radial arteries, of horses, these vessels were found to become inflamed, and to be rendered impervious by such a process, when however these means fail, we must have recourse to, when applicable, the ligature, and considerable judgment, is required.

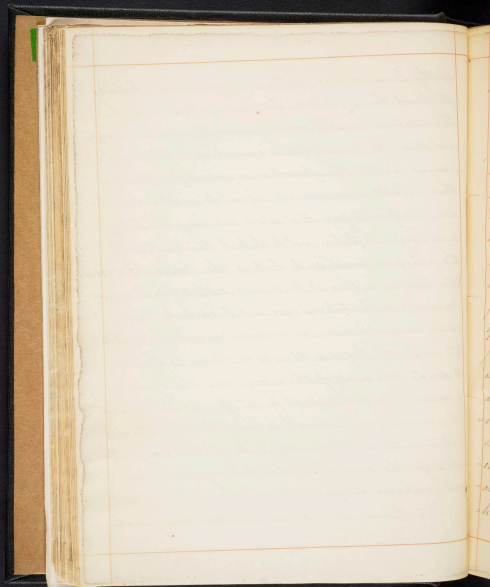


to ascertain, how great a distance above the sac, the ligature should be applied, as we know, that the ligature must be placed on a sound part of the artery, to produce the desired effects, there is also, some attention necessary, as to the form of the ligature;—it is now generally known, that when a ligature, is applied to a sound artery, and drawn with sufficient force, it divides the internal, and middle coats, and leaves the external coat entire. the blood coagulates, and forms a clot, of the calibre of the artery, extending to the next collateral branch, in the mean time coagulable lymph is poured out, the divided edges of the artery are agglutinated together, the ligature acting as a foreign body, keeps up a constant irritation, ulceration is the consequence and the ligature is detached, lymph is poured out between the ends of the artery into which vessels shoot and form a permanent clume. — After a time the coagulum is absorbed, and the calibre of the artery is perma-

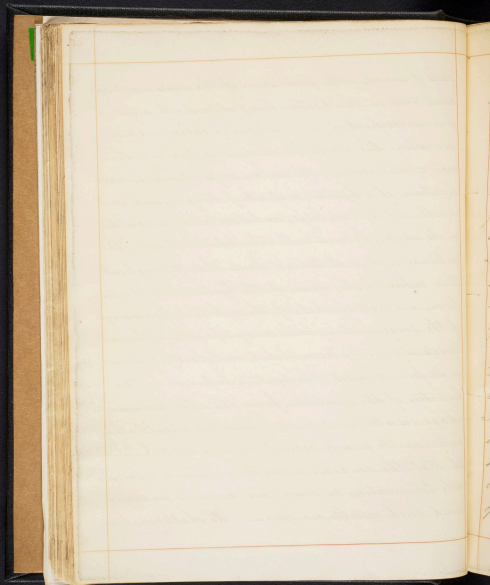


mentally closed, as high as the first anastomosing branch, the blood being stopped in its course, passes through the collateral vessels, which gradually increase in size, and thus the circulation is carried on to the neighbouring parts: the operation required for effecting these results is so simple, as not to need a description, suffice to say, that when reaching the artery great care is to ^{be} taken not to disturb the position of the artery so much as to destroy the Arteria Arteriosa, the ligature is then to be carried with a blunt aneurismal needle, taking care, not to include the accompanying nerve, or cellular membrane, within the loop: the knot is then to be drawn so tight as to divide the coats of the artery, after the ligature is secured, one end should be cut off close to the knot the remaining end should be brought out of the upper portion of the wound for the sake of cleanliness, the edges of the wound should be brought together with adhesive strips.

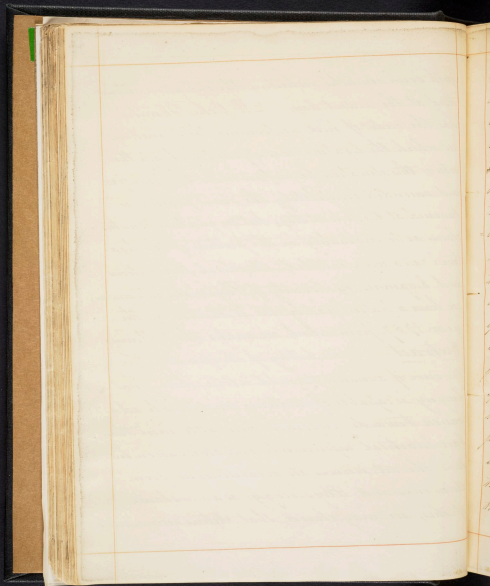
Sometimes even this operation



fails of success, either from some of the causes mentioned
 above, such as, the ligature being improperly applied,
 or from ossification, or depositions of calcareous matter
 preventing the complete division, of the intima
 coats of the artery, or from an improperly formed
 ligature; if a ligature, instead of being round and
 small, is flat and large, and twisted or irregular
 in its shape, it is not well calculated to divide, the
 intimal coats, or it does not divide them throughout
 their entire circle; again, if the ligature be of a proper
 form, and well applied, if through the officiousness
 of the surgeon, it is pulled away before the adhesive
 success is perfectly accomplished; and, lastly, if from
 an ill formed knot, the ligature be forced, by the
 impetus of the circulation, from the artery, hemor-
 rhage results: such results as these, we should always
 endeavor to guard against: but it is not to be expect-
 ed that the surgeon is able to command a favor-
 able termination in every case, happily for man-
 kind such results are rare. — We shall conclude



with some remarks respecting the operation, as practised at the present day. Mr John Hunter has the credit of first performing the operation, in which the ligature was applied high up the artery; this operation he performed in the year 1785, and succeeded completely; the same practice is pursued at the present day; but we question Hunter's claim as to originality in the position of the ligature: in a work entitled, *Medical Observations and Enquiries*, by a society of Physicians, in London, we have a paper read by Mr W. Hunter in the year 1787, from which we make the following Extract "the history of the operation for the cure of aneurism, would alone show, that Surgery is capable of making considerable advances towards perfection, from little more than bare practical experiments and observation, but that the art derives its greatest light from Anatomy and Physiology; as an instance of this, we may observe that Aetius recommends



the very operation that we practice at the present day for an aneurism at the bend of the arm; but instead of the Tourniquet as a preparatory measure, he orders first of all to lay bare the ~~arm~~ artery below the armpit, to tie it there at that place, and to cut it quite through between the ligatures. At this time it is more than probable that William and John Hunter, were upon friendly terms, and if so we think, that the fact of Astruc's having applied a ligature, on a sound part of an artery, was in the course of conversation, mentioned by the former to the latter. Again we make the following extract from Cooper's surgical Dictionary, edition 1822. speaking of Ligatured aneurism, he says, "with respect to the Hunterian Practice, the great peculiarities of which, were tying the artery, at some distance above the disease, and not opening the swelling at all, Richardson seems offended that, Hunter's name should be applied, to an



operation, which he conceives was in reality an invention of Guillemeau, but we observe that he again puts in a prior claim; And tried the artery above the swelling, in a case, similar to that of Guillemeau, viz, for an aneurism at the bend of the arm. In the year 1785 Lisault operated in the same manner, for a Pylitical aneurism; and towards the end of the same year we find Mr Hunter applying a ligature high up the artery."

Having thus we think, given sufficient proof, to warrant us ^{being} in ^a doubtful, with respect to the justice of Mr Hunter's claim, as to originality in the operation, of the ligature. Still we do not hesitate to say that the surgical world is much indebted to him, for the general application of it to practice.

* This incorrect - Mr Hunter's claim is undoubted -

